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Application No. 04 788 282.4 - 1224	Ref. EP41275DK900kap	Date 02.04.2009
Applicant Panasonic Corporation		

Communication pursuant to Article 94(3) EPC

The examination of the above-identified application has revealed that it does not meet the requirements of the European Patent Convention for the reasons enclosed herewith. If the deficiencies indicated are not rectified the application may be refused pursuant to Article 97(2) EPC.

You are invited to file your observations and insofar as the deficiencies are such as to be rectifiable, to correct the indicated deficiencies within a period

of 4 months

from the notification of this communication, this period being computed in accordance with Rules 126(2) and 131(2) and (4) EPC. One set of amendments to the description, claims and drawings is to be filed within the said period on separate sheets (R. 50(1) EPC).

Failure to comply with this invitation in due time will result in the application being deemed to be withdrawn (Art. 94(4) EPC).



Bensa, Julien
Primary Examiner
For the Examining Division

Enclosure(s): 3 page/s reasons (Form 2906)
XP004024959
US6370507

Datum
Date 02.04.2009Blatt
Sheet 1
FeuilleAnmelde-Nr.
Application No. 04 788 282.4
Demande n°

The examination is being carried out on the **following application documents:**

Description, Pages

2-4, 6-10, 12-45	as originally filed			
1, 5, 11	received on	19.01.2009	with letter of	19.01.2009

Claims, Numbers

1-24	received on	19.01.2009	with letter of	19.01.2009
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Drawings, Sheets

1/25-25/25	as originally filed			
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1. The application has been reconsidered in the light of the applicant's letter dated 19.01.2009 (hereafter referred to as A1) as well as of the corresponding amendments made to the application. Reference will also be made as may be required to the examining division's communication C1 (dated 09.07.2008).

For the reasons indicated below, the amended application still does not meet the requirements of the EPC.

2. The following documents are cited by the Examiner (see Guidelines C-VI, 8.2 and 8.3). Copies of the documents are annexed to the communication and the numbering will be adhered to in the rest of the procedure:

D2: MOULINES E. ET AL: "Non-parametric techniques for pitch-scale and time-scale modification of speech", SPEECH COMMUNICATION, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, vol. 16, 01 Feb. 1995 (1995-02-01), pages 175-206, XP004024959

D3: US 6370507 B1 (Fraunhofer-Gesellschaft) 9 April 2002 (2002-04-09)

3. The present application does not meet the requirements of Article 52(1) EPC because the subject-matter of claims 1, 9, 16 and 18 does not involve an inventive step within the meaning of Article 56 EPC.



3.1 Document D2 discloses:

A sampling rate conversion apparatus comprising:

a conversion section that obtains a spectrum from a time domain signal having an arbitrary sampling rate through a frequency domain conversion (see D2 page 188 left-hand column "Frequency-domain resampling method. Sampling rate conversion by arbitrary (possibly time-varying) ratios"); and
a bandwidth determining section that determines a bandwidth of an extending spectrum which is added to said spectrum and which extends the bandwidth of said spectrum (see page 190 right-hand column "Spectral copying can be performed only with frequency-domain resampling methods"),

3.2 The subject-matter of claim 1 therefore differs from this known in D2 in that the bandwidth of the extending spectrum is determined based on a ratio of said arbitrary sampling rate and a desired output sampling rate.

The problem to be solved by the present invention may therefore be regarded as how to determine the bandwidth of the extending spectrum. The solution proposed in claim 1 of the present application cannot be considered to involve an inventive step (Articles 52(1) and 56 EPC), for the following reasons:

The sampling rate ratio is the parameter defining the rate conversion (see D2). Therefore the skilled person willing to perform rate conversion by a frequency band extension method would obviously determine the bandwidth of the extending spectrum based on the sampling rate ratio.

3.3 The same objection applies mutatis mutandis to claims 9,16 and 18.

4. Dependent claims 2-8, 10-15, 17, 19-24 do not contain any additional features which, in combination with the features of any claim to which they refer, meet the requirements of Article 56 EPC regarding inventive step.

It particular, frequency domain spectrum extension applied to scalable coding is



already known in the field, see i.a. document D3. D3 already proposes to avoid upsampling filters in a scalable coder by performing bandwidth extension in the frequency domain (see column 3 line 59-column 4 line 8).

5. Adding to the previous objections, the application does not meet the requirements of Article 84 EPC, because claim 2 is not clear.

Claim 2 attempts to define its subject-matter in terms of the result to be achieved ("is equivalent to"). Such a definition is only allowable under the conditions elaborated in the Guidelines C-III, 4.10. In this instance, however, such a formulation is not allowable because it amounts to a mere statement of the problem to be solved.

6. It is not at present apparent which part of the application could serve as a basis for a new, allowable claim. Therefore, refusal of the application under article 97(2) is to be expected.